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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,124	12/19/2001	Moise Gaspard	1400.1374870	2815

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EXAMINER	
MEW, KEVIN D	

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/029,124	GASPARD ET AL.	
	Examiner	Art Unit	
	Kevin Mew	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 December 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Drawings

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In particular, the first sentence of the abstract, which is same as the title of the present application, should not be included on the abstract page. In addition, the abstract has exceeded 150 words in length.

Appropriate correction is required.

Claim Objections

3. Claims 26-30 are objected to because of the following minor informalities:

In claim 26, replace "fifth message" with "first message" in line 1 and replace "fifth device" with "first device" in line 2.

In claim 27, replace "fifth message" with "first message" in line 1, "fifth device" with "first device" in line 2, "fifth network address" with "first network address" in line 2, "fifth network device" with "first device" in line 3.

In claim 28, replace "sixth message" with "second message" in line 2, replace "fifth device" with "first device" in line 3, "sixth appropriate response" with "second appropriate response" in line 4, "sixth message" with "second message" in line 4, "sixth appropriate response" with "second appropriate response" in line 5, "fifth device" with "first device" in line 5.

In claim 29, replace "sixth appropriate response" with "second appropriate response" in lines 1-2, "fifth device" with "first device" in line 3.

In claim 30, replace "sixth appropriate response" with "second appropriate response" in lines 1-2, "fifth device" with "first device" in lines 2-3.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-16, 18-20, 22-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Bearden et al. (US Publication 2003/0097438 A1).

Regarding claim 1, Bearden discloses a method for automatic discovery of network devices (device discovery) within a managed network comprising the steps of:

selecting a first network address from a first set comprising a plurality of network addresses (getting a list of addresses used by devices in the network, paragraph 0106);

sending a first message to said first network address (sending a SNMP message) requesting information about any device (to request a MIB object from a device) associated with said first network address (associated with an address, paragraph 0106);

awaiting a first appropriate response to said first message (awaiting a response from a SNMP request during the device response time interval, paragraph 0210);

receiving a first appropriate response from a first device associated with said first network address (receiving an address associated with a device);

making said first device available for selection for management by a network management system (classify device by identifying and classifying the device type, paragraph 0111);

selecting a second address from said first set of network addresses (to get a list of addresses used by devices in network, paragraph 0106);

repeating said sending, and awaiting steps for said second network address (sending another SNMP message to request a MIB object from another device, paragraph 0106).

Regarding claim 2, Bearden discloses the method of claim 1 further comprising the steps of:

failing to receive a second appropriate response to a second message sent to said second address within a response time period (network devices may not have been discovered during the device discovery phase, paragraphs 0123, 0210).

selecting a third network address from said first set of network addresses (to get a list of addresses used by devices in network, paragraph 0106);

repeating said sending and awaiting steps for said third network address (sending another SNMP message to request a MIB object from another device, paragraph 0106).

Regarding claim 3, Bearden discloses the method of claim 1 wherein said first set of network addresses comprises a range of network addresses (a list of addresses, paragraph 0106).

Regarding claim 4, Bearden discloses the method of claim 1 wherein said first set of network addresses comprises a list of network addresses (a list of addresses, paragraph 0106).

Regarding claim 5, Bearden discloses the method of claim 1 further comprising the steps of:

selecting a fourth network address from a first set comprising a plurality of network addresses (getting a list of addresses used by devices in the network, paragraph 0106);

sending a fourth message to said first network address (sending a SNMP message) requesting information about any device (to request a MIB object from a device) associated with said first network address (associated with an address, paragraph 0106);

awaiting a fourth appropriate response to said first message (awaiting a response from a SNMP request during the device response time interval, paragraph 0210);

Regarding claim 6, Bearden discloses the method of claim 1 wherein said step of sending said first message comprises sending said first message using a network management protocol (sending SNMP_GET message using SNMP protocol, paragraph 0106).

Regarding claim 7, Bearden discloses the method of claim 6 wherein said network management protocol comprises a Simple Network Management Protocol (SNMP) (SNMP, paragraph 0106).

Regarding claim 8, Bearden discloses the method of claim 1 wherein said step of receiving said first appropriate response to said first message comprises receiving a message comprising information about a type of said first device (receiving device type, paragraph 0111).

Regarding claim 9, Bearden discloses the method of claim 8 wherein said step of receiving said first appropriate response to said first message comprises receiving a message identifying said type of said first device as a device having data forwarding capabilities (receiving device type such as router that has forwarding capabilities, paragraph 0111).

Regarding claim 10, Bearden discloses the method of claim 2 wherein said step of failing to receive said second appropriate response to said second message comprises receiving a message comprising information about a type of a second device associated with said second network address (receiving device type, paragraph 0111).

Regarding claim 11, Bearden discloses the method of claim 10 wherein said step of failing to receive said second appropriate response to said second message comprises receiving a message identifying said type of said second device as a device other than a device having data forwarding capabilities (receiving device type such as router that has forwarding capabilities, paragraph 0111).

Regarding claim 12, Bearden discloses the method of claim 1 further comprising the step of obtaining configuration information for said first message prior to sending said first message (collect device configuration data such as MIB tables prior to sending SNMP_GET message, paragraphs 0115, 0117).

Regarding claim 13, Bearden discloses the method of claim 12 wherein said step of obtaining said configuration information for said first message comprises obtaining said configuration information from said first set (collecting configuration data from each device, paragraph 0115).

Regarding claim 14, Bearden discloses the method of claim 12 wherein said step of obtaining said configuration information for said first message comprises obtaining a response time period (obtaining estimate response time interval for each monitored network device, paragraph 0210).

Regarding claim 15, Bearden discloses the method of claim 12 wherein said step of obtaining said configuration information for said first message comprises obtaining security parameters (collecting MIB data, paragraphs 0112, 0115).

Regarding claim 16, Bearden discloses the method of claim 1 wherein said step of making said first device available for selection for management by a network management system comprises adding said first device to a set of discovered devices (making device available by storing the data discovery results including the device type and address in the database comprising the discovered devices, paragraphs 0106, 0116).

Regarding claim 18, Bearden discloses the method of claim 16 further comprising the step displaying said set of discovered devices on a display device (devices discovered in the discovery phase are displayed on a device, see Figs. 19A, 19B and paragraph 0233).

Regarding claim 19, Bearden discloses the method of claim 1 further comprising the step of creating said first set of network addresses (a list of IP addresses, paragraph 0012, 0013, 0106).

Regarding claim 20, Bearden discloses the method of claim 19 wherein said step of creating said first set of network addresses comprises receiving a beginning network address and an ending network address (a subnet of IP addresses which comprises a beginning IP address and an ending IP address, paragraphs 0012, 0013).

Regarding claim 22, Bearden discloses the method of claim 1 further comprising the steps of:

receiving a fifth appropriate response from a fifth device associated with said first network address (receiving an address associated with a device);

making said fifth device available for selection for management by a network management system (classify device by identifying and classifying the device type, paragraph 0111).

Regarding claim 23, Bearden discloses the method of claim 22 wherein said step of receiving said fifth message from said fifth device comprises receiving a SNMP message (SNMP_GET message, paragraph 0106).

Regarding claim 24, Bearden discloses the method of claim 22 wherein said step of making said fifth device available for selection for management by a network management system comprises adding said fifth device to a set of discovered devices (making device available by storing the data discovery results including the device type, address in the database comprising the discovered devices, paragraphs 0106, 0116).

Regarding claim 25, Bearden discloses a method for automatic discovery of network devices within a managed network comprising the steps of:

receiving a first appropriate response from a first device associated with said first network address (receiving an address associated with a device);

making said first device available for selection for management by a network management system (classify device by identifying and classifying the device type, paragraph 0111).

Regarding claim 26, Bearden discloses the method of claim 26 wherein said step of receiving said first message from said first device comprises receiving a SNMP message (using SNMP to reply the requested SNMP_GET message, paragraph 0106).

Regarding claim 27, Bearden discloses the method of claim 26 wherein said step of receiving said first message from said first device comprises receiving a first network address associated with said first network device (using SNMP to reply a network address for the requested SNMP_GET message, paragraph 0106).

Regarding claim 28, Bearden discloses the method of claim 27 further comprising the steps of:

sending a second message to said first network address requesting information about said first device (sending a SNMP message to request a MIB object from a device, paragraph 0106);

awaiting a second appropriate response to said second message (awaiting SNMP response during a response time interval, paragraph 0210);

receiving a second appropriate response from said first device (receiving the requested MIB object from the device, paragraph 0106).

Regarding claim 29, Bearden discloses the method of claim 28 wherein said step of receiving said second appropriate response comprises receiving a message comprising information about a type of said first device (receiving device type, paragraph 0111).

Regarding claim 30, Bearden discloses the method of claim 29 wherein said step of receiving said sixth appropriate response comprises receiving a message identifying said type of said fifth device as a device having data forwarding capabilities (receiving device type such as router that has forwarding capabilities, paragraph 0111).

Regarding claim 31, Bearden discloses an apparatus for automatic discovery of network devices within a managed network comprising:

a display device comprising a discovery range window for displaying a network address range for discovery of network devices (user interface for displaying information gathered about network devices at the discovery phase, paragraph 0233) and a discovered devices window for displaying identification information for devices discovered within said network address range (device address is displayed, Fig. 24).

Regarding claim 32, Bearden discloses the apparatus of claim 31 further comprising a user interface for accepting input from a user, said user interface comprising means for said user to specify said discovery range (user can input manual edits by interacting with visual network topology display and user can modify or add link entries to the topology, paragraph 0103).

Regarding claim 33, Bearden discloses the apparatus of claim 32 wherein said user interface comprises means for said user to select one or more of said discovered devices displayed in said discovered devices window for management by a network management system (paragraph 0233 and Figs. 19A, Fig. B).

Regarding claim 34, Bearden discloses the apparatus of claim 33 further comprising a network communications system for sending network communications to each network address in said discovery range (sending a SNMP_GET message to request a common MIB object from a device associated with an network address in a network) and for receiving responses from any

network address in said discovery range (all devices using SNMP to reply with the requested object, paragraph 0106).

Regarding claim 35, Bearden discloses the apparatus of claim 32 wherein said range comprises a plurality of contiguous network addresses (a plurality of addresses that belong to the same subnet, paragraph 0012).

Regarding claim 36, Bearden discloses the apparatus of claim 32 wherein said range comprises a plurality of discreet, non-contiguous network addresses (a plurality of addresses that belongs to another subnet, paragraph 0012, 0013).

Regarding claim 37, Bearden discloses the apparatus of claim 34 comprising a message response analyzer for analyzing responses received from network addresses in said discovery range (the device discovery in the topology discovery element 310 learned the subnet addresses for the discovered devices, paragraph 0110).

Regarding claim 38, Bearden discloses the apparatus of claim 37 wherein said message response analyzer (topology discovery, element 310, Fig. 4) comprises identification means for identifying a type of a device sending a response (topology discovery element comprises the function for receiving device type such as router that has forwarding capabilities, paragraph 0111).

Regarding claim 39, Bearden discloses the apparatus of claim 34 wherein said network communications system comprises means for receiving messages originating from network devices (topology discovery 310 comprises means for recording the address of the device, paragraph 0106).

Regarding claim 40, Bearden discloses the apparatus of claim 34 wherein said means for receiving messages originating from network devices comprises means for receiving SNMP messages (topology discovery 310 comprises means for receiving SNMP reply from devices, paragraph 0106).

Regarding claim 41, Bearden discloses the apparatus of claim 34 wherein said discovery range comprises IP addresses (IP addresses, paragraphs 0106, 0012, 0013).

Regarding claim 42, Bearden discloses the apparatus of claim 31 wherein said discovered devices window comprises information identifying a discovered device's type (identifying device type, paragraph 0111).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bearden et al. (USP 6,917,626).

Regarding claim 17, Bearden discloses all the aspects of the claimed invention set forth in the rejection of claim 16 above, except fails to explicitly show the method of claim 16 wherein said step of adding said first device to a set of discovered devices comprises the step of deleting an existing device associated with said first network address from said set of discovered devices prior to adding said first device to said set of discovered devices. However, Bearden discloses that each device is uniquely assigned an address that an existing device. Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to modify the device discovery method and system of Bearden with the further teaching of Bearden such that an existing device associated with a particular uniquely assigned address must be deleted from a set of discovered devices first prior to adding this device to the set of discovered devices. The motivation to do so is to make sure a network address is uniquely associated with only one network device such that the device is easily identified by this network address.

6. Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bearden et al. in view of Novaes (USP 6,791,981).

Regarding claim 21, Bearden discloses all the aspects of the claimed invention set forth in the rejection of claim 19 above, except fails to explicitly show the method of claim 19 wherein said step of creating said first set of network addresses comprises receiving a data file containing a plurality of discrete network addresses. However, Novaes discloses storing IP addresses in a configuration file. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the device discovery method and system of Bearden with the teaching of Novaes such that the plurality of network addresses will be received in a data file.. The motivation to do so is to make the configuration file containing the IP addresses available to other network nodes during broadcast.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,917,626 to Duvvury

US Patent 6,516,345 to Kracht

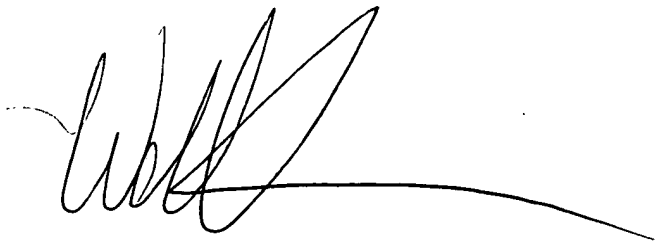
US Patent 6,895,433 to Slater et al.

US Publication 2003/0154271 to Baldwin et al.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 571-272-3141. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WELLINGTON CHIN
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